

CLAIM LISTING

The following is a current listing of the claims, indicating that no amendments are made.

1-2. (Cancelled)

3. (Previously Presented) The method of claim 63, wherein said step of establishing connectivity configuring further includes the step of configuring at least one switch such that a plurality of physical links associated with a plurality of data link connection identifiers (DCLIs) are coupled together.

4. (Previously Presented) The method of claim 3, wherein said step of configuring at least one switch configuring further includes the step of configuring a digital subscriber loop access multiplexer (DSLAM) connected to a plurality of second communication devices such that said second communication device associated with said specified identifier is connected by said step of establishing connectivity.

5. (Previously Presented) The method of claim 63, wherein said step of establishing connectivity configuring further includes the step of configuring the network device to route data over a plurality of physical links associated with said predefined identifier.

6. (Cancelled)

7. (Previously Presented) The method of claim 63, wherein said first communication device is located in a network service provider communication system.

8. (Previously Presented) The method of claim 63, wherein said first communication device is located in said access provider communication system.

9. (Previously Presented) The method of claim 63, wherein said step of associating further includes the step of associating a predefined circuit identifier (ID) with said second communication device.

10. (Previously Presented) The method of claim 63, further including the step of assigning a first internet protocol (IP) address, wherein said first IP address corresponds to said second communication device.

11. (Original) The method of claim 10, further including the step of associating a second IP address with said first IP address.

12-15. (Cancelled)

16. (Previously Presented) The method of claim 63, further including verifying a right to access and the steps of specifying and establishing are implemented only after the right to access is verified.

17. (Cancelled)

18. (Previously Presented) The method of claim 63, further including monitoring activity between said first communications device and said second communications device, and further including terminating connectivity after a predefined period of no activity.

19-36. (Cancelled)

37-53. (Cancelled)

54-61. (Cancelled)

62. (Previously Presented) The method of claim 10, wherein the step of assigning the first IP address is performed by the access provider.

63. (Previously Presented) A computer-implemented method, implemented in a troubleshooting portal device, for providing connectivity between a first communication device and a second communication device, the second communication device residing in an access provider communication network, the method comprising the steps of:

receiving a specification from the first communication device over a first communication channel, wherein the first communication device is located in a first network operated by a first provider, the specification comprising at least one predefined identifier of the second communication device;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device, wherein the second communication device is located in a second network operated by a second provider different than the first provider;

identifying a statically configured second communication channel to the second communication device that is associated with the predefined identifier;

configuring a network device to establish a route between the first communication device and the second communication device using the identified statically configured second communication channel;

receiving at least troubleshooting data and a test from the first communication device;
and

communicating the received troubleshooting data and the test to the second communication device.

64. (Previously Presented) The method of claim 63, wherein the predefined identifier is an IP address and the predefined communication channel is a VC.

65. (Cancelled)

66. (Previously Presented) The method of claim 63, wherein the first provider is a network service provider and the second provider is an access network provider.

67. (Previously Presented) The method of claim 66, wherein the method is performed by a device located in the second network operated by the access network provider.

68. (Previously Presented) The method of claim 63, wherein the configuring step further comprises the step of configuring a DSLAM to couple the first communication channel to the second communication channel.

69. (Previously Presented) The method of claim 63, wherein the predefined identifier is a circuit ID, and the circuit ID is associated with an IP address previously assigned to the second communication device.

70. (Previously Presented) The method of claim 63, wherein the predefined identifier is a circuit ID, further comprising the steps of:

at the network service provider, assigning a permanent IP address to the second communication device; and

associating the circuit ID with the assigned IP address.

71. (Previously Presented) The method of claim 63, wherein the predefined identifier is a circuit ID, further comprising the steps of:

at a network service provider, assigning a temporary IP address to the second communication device, the IP address selected from a pool of available addresses; and

associating the circuit ID with the assigned IP address.

72. (Previously Presented) The method of claim 63, further comprising the step of verifying the request before the configuring step.

73. (Previously Presented) The method of claim 63, further including the steps of:
monitoring activity between the first communications device and the second
communications device; and
terminating connectivity between the first communications device and the second
communications device after a predefined period of no activity.

74. (Previously Presented) The method of claim 63, wherein a portion of the access
provider communication network is a frame relay network.

75. (Previously Presented) The method of claim 63, wherein a portion of the access
provider communication network is an asynchronous transfer mode (ATM) network.

76. (Previously Presented) The method of claim 63, wherein a portion of the access
provider communication network is an internet protocol (IP) network.

77. (Previously Presented) The method of claim 63, wherein a portion of the access
provider communication network is a multiprotocol label switching (MPLS) network.

78. (Cancelled)79. (Previously Presented) The method of claim 112, wherein the
predefined identifier is an IP address and the predefined communication channel is a VC.

80. (Cancelled)

81. (Cancelled)

82. (Previously Presented) The method of claim 112, wherein the receiving the
request step is performed in the access network provider network.

83. (Previously Presented) The method of claim 112, wherein the instructing step
further comprises configuring a DSLAM to couple the first channel to the second channel.

84. (Previously Presented) The method of claim 112, wherein the predefined identifier is a circuit ID, and the circuit ID is associated with an IP address previously assigned to the managed communication device.

85. (Previously Presented) The method of claim 112, wherein the predefined identifier is a circuit ID, further comprising:

assigning, at the network service provider, a temporary IP address to the managed communication device, the IP address selected from a pool of available addresses; and
associating the circuit ID with the assigned IP address.

86. (Previously Presented) The method of claim 112, further comprising verifying the request, wherein the configuring step is dependent on the successful operation of the verifying step.

87. (Previously Presented) A computer-implemented method, implemented by a troubleshooting portal, for providing connectivity between a first communication device and a second communication device, the method comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

identifying a predefined second communication channel to the second communication device that is associated with the predefined identifier;

instructing a network device to couple the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device using the predefined second communication channel, the first

communication device located in a first network operated by a first provider, and the second communication device located in a second network operated by a second provider different than the first provider;

receiving at least troubleshooting data and a test from the first communication device;
and

communicating the received troubleshooting data and the test to the second communication device.

88. (Previously Presented) The method of claim 87, wherein the first network is operated by a network service provider and the second network is operated by an access network provider.

89. (Previously Presented) The method of claim 88, wherein the method is performed by a device located in the second network operated by the access network provider.

90. (Previously Presented) The method of claim 87, wherein the step of associating further includes the step of associating a predefined circuit identifier (ID) with the second communication device.

91. (Previously Presented) The method of claim 87, further including the step of assigning a first internet protocol (IP) address, wherein the first IP address identifies the second communication device.

92. (Previously Presented) The method of claim 91, further including the step of associating a second IP address with the first IP address.

93. (Previously Presented) The method of claim 91, wherein the step of assigning the first IP address is performed by the network operated by the first provider.

94. (Previously Presented) The method of claim 87, further including the steps of:
monitoring activity between the first communications device and the second
communications device

terminating connectivity between the first communications device and the second
communications device after a predefined period of no activity.

95. (Previously Presented) The method of claim 87, further comprising the step of
verifying the request before the configuring step.

96. (Previously Presented) The method of claim 87, wherein the predefined identifier
is an IP address.

97. (Previously Presented) The method of claim 87, wherein the predefined
communication channel is a VC.

98. (Previously Presented) The method of claim 87, wherein the coupling step further
comprises the step of configuring a DSLAM to couple the first communication channel to the
second communication channel.

99. (Previously Presented) The method of claim 98, wherein the predefined identifier
is a circuit ID, and the circuit ID is associated with an IP address previously assigned to the
second communication device.

100. (Previously Presented) The method of claim 98, wherein the predefined identifier
is a circuit ID, further comprising the steps of:

at the network of the first provider, assigning a permanent IP address to the second
communication device; and

associating the circuit ID with the assigned IP address.

101. (Previously Presented) The method of claim 87, wherein a portion of the second network is a frame relay network.

102. (Previously Presented) The method of claim 87, wherein a portion of the second network is an asynchronous transfer mode (ATM) network.

103. (Previously Presented) The method of claim 87, wherein a portion of the second network is an internet protocol (IP) network.

104. (Previously Presented) The method of claim 87, wherein a portion of the second network is a multiprotocol label switching (MPLS) network.

105. (Previously Presented) A computer-readable medium having a program, implemented by a troubleshooting portal, for providing connectivity between a first communication device and a second communication device, the program comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device, the first communication device located in a first network operated by a first provider and the second communication device located in a second network operated by a second provider different than the first provider;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

identifying a statically configured second communication channel to the second communication device that is associated with the predefined identifier;

coupling the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device;

receiving at least troubleshooting data and a test from the first communication device;
and
communicating the received troubleshooting data and the test to the second communication device.

106. (Previously Presented) The computer-readable medium of claim 105, wherein the first network is operated by a network service provider.

107. (Previously Presented) The computer-readable medium of claim 105, wherein the second network is operated by an access network provider.

108. (Previously Presented) The computer-readable medium of claim 105, wherein a portion of the second network is a frame relay network.

109. (Previously Presented) The computer-readable medium of claim 105, wherein a portion of the second network is an asynchronous transfer mode (ATM) network.

110. (Previously Presented) The computer-readable medium of claim 105, wherein a portion of the second network is an internet protocol (IP) network.

111. (Previously Presented) The computer-readable medium of claim 105, wherein a portion of the second network is a multiprotocol label switching (MPLS) network.

112. (Previously Presented) A computer-implemented method, implemented by a troubleshooting portal, for providing connectivity between a troubleshooting manager device and a managed communication device, the method comprising the steps of:

creating, upon user request, a statically configured predefined first channel between the managed communication device and an access unit within an access provider network;

receiving, over a second channel, an identifier of the managed communication device from the troubleshooting manager device;

receiving, from the troubleshooting manager device, a request to establish connectivity between the troubleshooting manager device and the identified managed communication device;

instructing a network device to couple the statically configured predefined channel to the second channel, producing a third channel;

receiving at least troubleshooting data and a test from the troubleshooting manager device; and

communicating the received troubleshooting data and the test to the managed communication device over the third channel.